

# Kmesh Community Meeting Notes

	Kmesh Community Meeting
Leads	
Discussion Forum	
Slack Channel	
Design Docs	<a href="#">Team Drive Folder</a>
Meeting Recordings	
Meeting Schedule	
Meeting Link	
Roadmap	

- **Reminder:**
  - **Record this meeting!**
  - **Please add your agenda!**
- **Next Meeting**

Sep 4, 2025

- [IPsec Issue] huanghaobin
  - Has been fixed
- [serviceEntry] mengyuan
  - Has been merged
  - A patch release
- [CNCF onboarding] huanghaobin
- [integration of istio and orion]
- Kmesh release v1.2
  - orion ?
  - OSPP
  - Service Entry
  - Rate limit and circuit breaker of Dual engine mode

Aug 28, 2025

- [IPsec issue] huanghaobin
  - Need to confirm that the parse processing is generic
- 

Aug 21, 2025

- [OSPP]
  - Mid-term assessment next week.
- [Feature]
  - Use Cases for Kmesh global rate limit
  - dual-engine user case with waypoint support for circuit breaker and rate limit
  - User case for ingress gateway
  - mTls
- [IPSec bug]
  - [Some issues encountered in writing Ipsec E2E tests · Issue #1481 · kmesh-net/kmesh](#)
- [e2e author question]
  - [Problems encountered in writing E2E authentication policy tests · Issue #1490 · kmesh-net/kmes](#)

Aug 14, 2025

- [Kmesh IPsec]
  - [Some issues encountered in writing Ipsec E2E tests · Issue #1481 · kmesh-net/kmesh](#)
  -
- [LFX membership]
  - Mentee applications are closed
  - Mentors have until the 26th to select mentee
- [DNS interception]
  - Building ip tables with serviceCache.
  - combining sidecar and ztunnel schemes
- [OSPP] e2e test
  - Add a docs about differences between Kmesh and istio configuration semantics

Aug 7, 2025

- [OSPP] e2e test supplement
  - IPsec failed
    - Submit an issue.
- [dns interception] @Kuromesi
  - Dns resolver
- 

Jul 24, 2025

- [LFX] Sep-Nov
  - [\[LFX-2025-Sep-Nov\] Improving Ipsec's Stability and Ease of Use · Issue #1457 · kmesh-net/kmesh](#)
  - [\[LFX-2025-Sep-Nov\] Kmesh Orion replace waypopint · Issue #1450 · kmesh-net/kmesh](#)
    - Use xds communication with the control plane
    - Capacity of traffic management
- [dns interception] @Kuromesi
  - [Kmesh supports dns interception and resolution · Issue #1451 · kmesh-net/kmesh](#)
  - Use cgroup connect hook point
  -
- [OSPP] Gaoxiaojian
  - The semantics of allow authorization differ from those of istio
  - Update helm charts
- [OSPP] wuxi
  - Service manager check in IPv6
  -

Jul 24, 2025

- [OSPP] mahaoyuan
  - Determine when not to do bpf map reconstruction
  - How to rebuild bpf map
- [ali cloud] serviceEntry
  - Supplemental dns intercept operations
- [OSPP]e2e test
  - Ip header and service is ready
- [OSPP] e2e of ebpf
  - Skb packet
- [Orion] Adaptation testing
  -

## Jul 17, 2025

- [OSPP] Yash Israni
  - The Kmesh website automation capacity building and documentation optimization
- [OSPP] wuxi
  - UT Supplement to the Kmesh eBPF program
- 

## Jul 10, 2025

- [OSPP] mahaoyuan
  - The proposal of Kmesh-daemon upgrades traffic without disruption
- [OSPP] gaoxiaojian
  - IPSec & Offload Authorization E2E Test Proposal
- [OSPP] caoyusen
  - Verifying and Complementing Kmesh Feature
- [Orion]
  - Follow-up on the donation of Orion
  - All maintainers have voted in approval

## Jul 3, 2025

- [Kick-off meeting of Kmesh OSPP] lizhcheng
- 

## Jun 26, 2025

- donate Orion to Kmesh Dawid Nowak <https://gitee.com/orion-proxy/orion> and

<https://github.com/kmesh-net/community/issues/14>

- Will vote after community meeting
- Replace waypoint still need some work to do
- 
- [OSPP] lizhcheng
  - Sync progress weekly
  -

Jun 19, 2025

- [donata Orion to Kmesh] Dawid Nowak
  - Let's discuss it again next week
  -
- [OSPP]
  - mentor review stage
  - DDL: 6.20
- [authz]
  - do authorization in waypoint if have waypoint
  - else handle it in XDP
- 

Jun 12, 2025

- skipped due to maintainers attending KubeCon China 2025.

Jun 5, 2025

- [OSPP] lizhcheng
  - DDL: Jun 9
- []

May 29, 2025

- [OSPP] lizhcheng
  - [Kmesh website automation capacity building and documentation optimization]
  - [UT Supplement to the Kmesh eBPF program] wuxi
  - [Kmesh supports multi-clusters]
  - [Kmesh-daemon upgrades traffic without disruption]
  - [E2E of IPsec and offload Authorization] gao xiaojian
  - [Verifying and Complementing Kmesh Feature] cao yusen
- [release v1.2]
  - Feature Support:
    - Fault recovery
      - add the tool to quickly exit at the prog entrance

- Offload Authorization
  - Network segment-based authorization
- Mtls?(after questioning and deciding)
- 
- Complement extension capabilities:
  - support dns service Entry[dual-engine] mengyuan
  - support rate-limit and circuit breaker
    - 1.24 istio ambient support (envoy filter)
    - add docs
  - IPsec
    - Enhanced stability
    - Simplified configuration
  -

May 22, 2025

- [OSPP] lizhcheng
  -

May 15, 2025

- [release 1.1]
  - published
  - TODO:
    - new release news(yaozengzeng)
    - Archiving of old documents (create an issue)
      - <https://github.com/kmesh-net/website/pull/180>
    - Makefile Version (create an issue)
    - add release 1.1 in website recent news
    -
- [offload auth conflict with waypoint] lizhcheng9527
  - [There is a problem with setting Authorization for workloads in waypoint managed. · Issue #1394 · kmesh-net/kmesh](#)
  - TODO:
    - check istiod version which service waypoint is nil
    -
- [OSPP]:
  - Creating a issue and tracking tasks
  - IPsec
    - xiaojian gao has submit a proposal
    -
- [Zoom]

- <https://zoom-lfx.platform.linuxfoundation.org/meeting/99299011908?password=f4c31ddd-11ed-42ae-a617-3e0842c39c58>
- readme ... meeting link need to update

## May 8, 2025

- [ebpf unit test] tianzhenxiong
  - More detailed documentation
- [bpf\_trace\_printk] zhangmingyi
  - dual-engine mode is not affected
  - kernel-native mode is affected in high-concurrency.
- [release v1.1]
  - bug fix
  - [Kmeshctl v1.1.0-alpha long connection · Issue #1366 · kmesh-net/kmesh](#)
  -
- [OSPP]
  - The projects has been published

## April 24, 2025

- [release 1.1]
  - release Note: (Done)
  - alpha release: (TODO)
  - Kernel-Native Mode Monitoring: delay
  -
- [ospp] Verifying istio functionality at kmesh dual engine mode.
  - Analyze what is missing
  - Documentation of usage examples for existing features
  - locality load balance
  - circuit breaker

- rete limit
  - Ingress
  - engress
  -
- [OSPP] Zero down time during upgrade if bpf map does not change
  - mentor: xuzhonghu
  - need to compare the map structure
  - ask: wuchangye/liuxin
- [OSPP] IPsec e2e and offload authorization and user guide docs
  - mentor: yaozengzeng/liwei
- [OSPP] support multi-cluster
  - TBD
- [OSPP] Monitoring
- [OSPP] region related flags (mengyuan)
- [LFX] Periodic sync status
- 

April 17, 2025

- [long connection metrics] Do we need to create a few new metrics to represent the metrics for long connections?
  - [feat: added new prometheus metrics for long conn by yp969803 · Pull Request #1305 · kmesh-net/kmesh](#)
  - Use original workload metrics refresh function.
- [release 1.1]
  - release note (**yaozengzeng**)
  - support istio 1.25(done)
  - webiste refactor (done)
  - long connection metrics (function done)
  - dns refactor(done)
  - kernel native metrics(L4 done)
  - use global variable optimise bpf config map (done)



- Optimise kernel native mode to reduce intrusive modifications to the kernel. (done)
  - bug fix
    - kmeshctl install waypoint error (fixed)
    - kmesh restart (fixed)
  - DDL: 25 April
- [OSPP]:
  - ddl of submit proposal : May 4
  - UT、E2E、Docs
  - [gaoxiaojian]:
    - want to develop new features
    -
- [LFX Term 02 - 2025 Jun - Aug]
  - April 16 – Tue, May 13
  - E2E、
  - participate
- Kmesh control plane?

## April 10, 2025

- [ebpf unit test] tianzhenxiong
  - Finished the framework and XDP for UT
- v1.1
  - [long connection metrics](#)
  - [kernel native mode](#)
- LFX
  - mid review
- 

## April 3, 2025

- [restart flask] yaozengzeng
  - function bpf\_map\_update\_elem doesn't work as expected
  - 5.10->6.x
  -
- [kubecon NA]
  - Submissions of CFP are open.
  -
- [kernel native metrics] zhangmingyi
  - L4 finished

Mar 27, 2025

- [IPsec cannot work properly in Kind clusters]
  - IPsec e2e
  - istio version 1.20->1.23/1.24
  -
- [OSPP]
  - 4.4-5.4 Submission of topics
  - mentees contacts
  - six topics
  -
- [yash]
  - draw a picture about your design and update to long connection metrics proposal.
- [adapt istio 1.25] yaozengzeng
  - submit an issue first
  -
- [website]
  - Add Recent News
  - submit new PR to merge `change-theme` to `main`
- [release 1.1]
  - April 11
  - progress of mtlS
  - hyper tls landing kmesh
  -

Mar 20, 2025

- [OSPP] Complete community enrollment
  - call for topics [\[2025 OSPP\] Kmesh's OSPP projects declaration · Issue #1281 · kmesh-net/kmesh](#)
  - change log in the official website
- [eBPF UT test] zhenxiong tian
  - LFX project
  - [update eBPF unit test by sancppp · Pull Request #1267 · kmesh-net/kmesh](#)
  - The UT framework is almost complete
    - The framework is divided into three parts: generating test packages, executing tests and checking test results.
    - mentor: mingyi or muyang
    - zhenxiong tian: Split PRs, split proposal, Framework, specific unit tests into small PRs
- [yp969803]:
  - Attaching tc program
  - Plan to keep website latest
- [e2e flask in ali cloud] mengyuan
  - They're all known issues.
  - [add channel for Rbac when Kmesh restart by weli-l · Pull Request #1275 · kmesh-net/kmesh](#)

Mar 13, 2025

- [kubcon China] Statistics of selected CFP
  - [mingyi] lighting talk
  - [yinhang lizhencheng] lighting talk
  - [zhonghu songyang] two 30 presents
  -
- [OSPP] Collection of issues
  -
- [Pretty print config dump]
  - [Pretty print config dump · Issue #1270 · kmesh-net/kmesh](#)
  - /assign [mengyuan]
  -
- [mtls] hyper tls
  - [muyang]
- [build issue] Compilation and building adjustment —zhangmingyi
  - Create a new folder for the compilation products
  - Modifying the base image
  - ko files are compiled on the host machine
- [auth offload] Whether enable auth offload by default —liwei
  - Resident on

Mar 6, 2025

- [Kmesh webiste] Jayesh Savaliya
  - requests:
    - double-click the picture to enlarge
    - add kmesh website into google analytics
    - Switching between different releases of docs
- [Suggestions for keeping website latest] yp969803
  - proposals still in kmesh repo
  - descriptive docs migrated to the website repo
- [Userspace auth incorrectly deny connection when Kmesh restart] yaozengzeng
  - add a flag that the user space of kmesh is ready after the restart.
  - when the policy is empty, the user space processing is not used.
  - <https://github.com/kmesh-net/kmesh/blob/main/pkg/auth/rbac.go#L184>
    - vote: if dstworkload not be found when kmesh-daemon is restarted, deny or allow this conn?
- [mtls]
  - xin liu is responsible for this feature
- [ebpf global var]
  - init when kmesh-daemon update
- 

Feb 27, 2025

- [yp969803] Tcp long\_conn\_metrics\_projects
  - Review of kernelspace and userspace code on pr <https://github.com/kmesh-net/kmesh/pull/1249>
  - Org\_dst problem: according to me based on my ebpf code, i think i have solved it
  - Intructions from the maintainers to compile and run ebpf code
  - Upcomming plans and implementations for the project
- [LFX]:
  - Email of acceptance of mentees has been sent
- [failed to set xdp to dev eth0]:
  - /assign tianmuyang
- [e2e restart flaky]
  - due to the istiod connection pool.
  - add retry policy
- [e2e authorization flaky]
  - [optimizie xdp auth by weli-l · Pull Request #1256 · kmesh-net/kmesh](#)

Feb 20, 2025

- [Kubecon China and Japen]:
  - lighting talk
  - ddl 2.23

- 
- [LFX 2025 first term]:
  - It's already at the stage of selecting mentee.
- [authorization e2e]:
  - [WIP: E2E test case for Kmesh L4 authorization by YaoZengzeng · Pull Request #641 · kmesh-net/kmesh](#)
- [Kmesh AI meeting]
- [restart e2e test flaky]

## Feb 13, 2025

- [Kmesh 1.1 release feature]:
  - expected release data: 28 March
  - feature:
    - mtls(priority support dual engine)
    - IPsec e2e test
    - ebpf global var
    - kernel native adapt
    - egress and dns refactor
  -
- [zhangmingyi] kmesh kernel - native mode enhanced kernel refactoring, forward incompatible, no longer compatible with native oe2303
  - support kernel version:
    - L4 not need kernel patch
    - L7 still need kernel patch
    - linux 6.6 kernel does not need to be patched
  - conclusion:
    - >1.0 release old kernel patches are no longer archived
    - [kmesh/kernel/patches/5.10.0 at release-1.0 · kmesh-net/kmesh](#)
- [liwei] TODO: e2e test of authorizaiton
- [AI gateway]:
  - gateway api inference extension
  -

## Feb 6, 2025

- [This regular Kmesh community meeting has been suspended this week.]

## Jan 30, 2025

- [This regular Kmesh community meeting has been suspended this week due to the Chinese Lunar New Year.]

## Jan 23, 2025

- [kubcon CN 2025]
  - ddl Feb 2nd

- [yaozengzeng] Kmesh authz offload
- [LFX]:
- [restart without interruption]: structure has not changed.

## Jan 16, 2025

- [yaozengzeng] AI Plugin API review
  - immediate response can't stream return results.
  - Head and body are sent separately
  - virtualMode and destinationRule
  - model config?
- [LFX] ([\[lfx-mentorship-2025-Mar-May\] Kmesh's LFX project declaration · Issue #1169 · kmesh-net/kmesh](#))
  - bpf prog ut test [liuxin]
  - dual-engine e2e test [yaozengzeng]
  - docs [lizhENCHENG]
  - locality log [xuzhonghu] ?
- 2025 road map
  - Multicluster  
<https://docs.google.com/document/d/1Wg6sx9ZUJL4AsHj5wM1kMx3E436s5wg2qoMqol-bqbQ/edit?tab=t.0#heading=h.ppr0kg59hrq3>
  - Network policy [cilium xuzhonghu]

## Jan 9, 2025

- Kubecon China 2025
  - ddl 2.2
  -
- LFX mentoring
  - [full-time schedule](#)
  - submit a topic
  - The way of operating in the community needs to be optimised (need a issue template)

- ddl 2.4
- 2025 road map
  - mtls
  - need end user requests
- Publicize:
  - Use LFX to gain a good reputation among foreign developers
  - v 1.0
  - [Kmesh release v1.0 - Google 文档](#)
- [zhangmingyi] kernel-native L7 Traffic control optimize
  - Reduce intrusive modifications to the kernel
  - target: No need to hack the kernel in 6.6 kernel version
  - submit a doc about kernel patch with kernel version
  - Contribute to the linux kernel community
- [liuxin] IPsec
  - Adaptation to some special usage scenarios.
  - problem:
    - There is already a link when starting Kmesh. In case of a short connection there will be a small percentage of links failed.
    - Fine-grained socket control required
    -
  - Need reviews
- [xuzhonghu] kmesh manager:
  - Consider only pods on Kmesh's own node

## Jan 2, 2025

- release v1.0
  - with alibaba publicize
  - with CNCF donation publicize

## DEC 26, 2024

- [yaozengzeng] AI Plugin API review
  - model hostname or only gateway hostname
  - Description of existing proposal
  - More relevant to real-world usage scenarios
  -
- [lizhcheng] egress
  - Service and workload address conflict
    - if a conflict occurs during workload and service in frontend map, not writing.
  - Frontend map residue when serviceEntry address changes
    - compare addresses in new service and old service
- v1.0 blockers:

- [Kmesh enable ipsec by bitcoffeeiux · Pull Request #1030 · kmesh-net/kmesh](#)
- auth of ip [support xdp auth of IPs by weli-l · Pull Request #1095 · kmesh-net/kmesh](#)
  - get authz before workload in xdp
  - collaboration problem with userspace
  - proposal need update
- OSPP need test

## DEC 19, 2024

- [lizhcheng] egress and serviceEntry
  - TODO: check ambient REGISTER\_ONLY and ALLOW\_ANY
  - TODO: add dns resolution logic
- [zhangmingyi] kernel-native mode enhanced kernel lack of machine to build and run E2E
  - TODO: ads L4 e2e
  - TODO: submit en issues to github: add OE os
- [xuzhonghu] observability
  - Monitoring of unknown services
    - should add block or pass in accesslog.
    - add connect failed metrics:
      - already had.
    -
- orion open source schedule: 2025
- [mengyuan]: Kmesh Metric
  - Modification of destination\_services in metric
  - TODO: headless service scenarios
- Documentation of OSPP's features required in new releases.

## DEC 12, 2024

- [xuzhonghu] kmesh benchmark
  - Kmesh vs Ambient
  - CPU resource consume
  - scripts link: [playground/performance\\_test/test.sh at main · hzxuzhonghu/playground](#)
  - [need link]
  - TODO: disable keepalive test: Done
    - L4 Kmesh better than ambient mesh(1/3)
    - L7 Kmesh better than ambient mesh (1/4). Not much difference at high concurrency
- [xuzhonghu] Structured Log
- [lizhcheng]:
  - support.md update
  - cgroup\_connect4\_prog doesn't trigger
- [mengyuan]:



- blog update
- kiali need more address info. Need add per address in cgroup connect

## DEC 5, 2024

- [lizhencheng] bpf map rename
  - [Issue #1081](#)
  - add a description doc
  - reply directly in issue
- [lizhencheng] increase the dimension of the metrics
  - [issue #1091](#)
  - rtt\_min & total\_retrans & lost\_out
- [liuxin] ipsec
  - [PR #1030](#)
  - kmeshNodeInfo: Contains information about all kmesh nodes in the cluster
  - Same node will not be encrypted
  - spi does not require strong synchronisation
  - Linearly increasing policy
  - The wireguard is not mature enough.
  - supported network adapter types
  -
- installation guide needs update
  - [Issue #1082](#)
- [yaozengzeng] serviceEntry
  - add map field to store endpoint-exclusive ports
  - Optimise the structure.
- [xuzhonghu]
  - Log Placeholder Replacement

## NOV 28, 2024

- [yaozengzeng] AI Gateway design & demo
  - AI Plugin
  - Compatible with various AI gateways given to envoys
  - flexib
  -

- [lizhENCHENG] support Headless service
  - problem:
    - refer to ztunnel how to select destination\_service
- [xuzhonghu] backend manager countercheck Compare Service
- [liwei] authz debug log
  - Missing namespace and identity information
  - Missing message that authz was reset
- [shunfeng]
  - fear
    - Kernel version too high
    - observability
    - Smooth migration

NOV 21, 2024

- [zhangmingyi] kernel native monitoring:
  - apply proposal
- [hang yin] Improve the compatibility of Kmesh observability with the Istio ecosystem
  - Timed erasing (no longer need)
  - Add metric trigger to facilitate performance testing
  - Problem:
    - kiali need ztunnel to collect waypoint metrics
- [wcy] read-write conflict:
  - have lock protect
  - usespace have a flag to controller add lock
  - There is no exception for reading an nil map
  - problem:
    - There will be dirty reads.
- [wcy] bpf loader failed:
  - optimise BPF\_LOG
  - init variables in bpf.
- [zhangmingyi]
  - large-scale need a issue

- [yaozengzeng] adapt isito 1.24
  - 1.24.1 e2e
  -

NOV 14, 2024

- [Zhonghu xu] bpf map update order
  - <https://github.com/kmesh-net/kmesh/issues/1042>
  - should: backend map-> endpoint map-> service map->frontend map
  - now: endpoint map-> service map->backend map->frontend map
  -
- [wcy] Share map in map optimization
  - use macros to define data type
  - define the data size based on the data length used by kmesh
  - optimize:
    - use the cache to store the key is used.
- [zhangmingyi] kernel native monitoring:
  - [kernel native monitor](#)
  - remaining problem:
    - get http destination service and response code
    - where to mount hook point?
- [hang yin] Improve the compatibility of Kmesh observability with the Istio ecosystem
  - clean metrics at a certain time.
  - rename exposed metrics (prefix 'kmesh\_' -> 'istio\_')
- [liwei] xdp auth in tailcall
  - Data Dirty Reading
  - Deletion problems with hashmap
- [liuxin] ipsec:
  - TODO: Supports different container networks
  - work in duel engine.

NOV 7, 2024

- [wcy] Share map in map optimization
  - Fixed Maximum length of value leads to wasted resources.
  - To support large scale, memory space is reserved, resulting in more consumption at startup.
  - optimise:
    - A set of fixed-size maps: sizeof value: 64, 128, 1024, 8192
    - Select the map according to the length of the information
    - use map\_type + index to locate information
  - remaining problem:
    - bpf verify returns out of memory with multiple maps
    - support prt -> multi index
- authz read/write consistency issues
  - There may be a problem with user space writes conflict reads from the kernel bpf program.
  - Link Level Authentication Issues.
  -

OCT 31, 2024

- Alibba has run kmesh successfully in ali cloud.
- 开源之夏：完整度，设计文档，代码，测试 doc, create a issue to track undone task
  - ebpf perf monitoring <https://github.com/kmesh-net/kmesh/pull/887> no big blocker, need to pass the feature knob down to bpf.
  - consistent hash: <https://github.com/kmesh-net/kmesh/pull/888/files> lack of bpf implement
  - bpf test <https://github.com/kmesh-net/kmesh/pull/920> sockops and cgroup/connect are not supported by framework?
  - ratelimit <https://github.com/kmesh-net/kmesh/pull/859> : concurrent token fill need to be reviewed carefully
  - Circuit breaker <https://github.com/kmesh-net/kmesh/pull/570> have been merged, missing doc
  - Dual Engine mode Locality LB <https://github.com/kmesh-net/kmesh/pull/900> : has been merged, missing tests, documents

- Istio ambient multi network proposal  
[https://docs.google.com/document/d/13c\\_r1doDCoRoEHuxk\\_eV8rnPi7X2pQgUWay9KMSSUrs/edit?tab=t.0#heading=h.ppr0kg59hrq3](https://docs.google.com/document/d/13c_r1doDCoRoEHuxk_eV8rnPi7X2pQgUWay9KMSSUrs/edit?tab=t.0#heading=h.ppr0kg59hrq3)
  - what should we do with e/w gateway.
- istio 1.24 has behavior change on service.waypoint, we do overwrite the waypoint address from hostname to ip in kmesh-daemon

## OCT 24, 2024

- lizhencheng: trace support in kmesh ebpf
  - tcp seq and thread id can be used to determine two packets belong to the same trace?
    - This may be not correct to assume req1->resp1 - wcy
- lizhencheng: use a map to store all bpf prog global configs
- Whether to provide a istio yaml in kmesh to only install istiod
  - agreed, it is not a big deal, user would not use this to install when used in production.
- liuxin: kmesh encryption: tc need to know whether a packet should be encrypted
  - maybe try sk storage
- mingyi: kernel native observability
  - kmesh daemon lack of workload info
- release v0.5.1 in the next week

## OCT 17, 2024

- <https://github.com/kmesh-net/kmesh/pull/778/files> bpf unit test framework
- <https://github.com/kmesh-net/kmesh/issues/966> create a repo for DNS Capture feature
  - Agree to add the plugin repository.
- XDP authentication solution design discussion
  - Verify the feasibility of the tail call mode.
  - Try bpf\_loop.
- kmesh ipsec encryption solution discussion
  - Added restrictions, background, and advantages and disadvantages of the solution.
  - Specifies whether to retain the mark of the socket in the cross-namespace scenario.

## OCT 10, 2024

- restart in ads — mingyi
  - Add the ADS data processing process and mark the data that needs to be persisted.
  - Design data persistence policies and solutions.
  - Verify the feasibility of the solution based on the specific process.
- Start mode: kernel-native/dual-engine
- KmeshCtl:
  - support dynamic enable/disable kmesh feature
- sandbox vote

## OCT 3, 2024

- **canceled** due to National Day

## Sep 26, 2024

- v0.5.0 release
  - <https://github.com/kmesh-net/kmesh/pull/610>
  - release note  
[https://docs.google.com/document/d/1nWZR\\_Gk45CY9R9iNf0idBkbwipTZ0bgEU0cALgHv9MA/edit](https://docs.google.com/document/d/1nWZR_Gk45CY9R9iNf0idBkbwipTZ0bgEU0cALgHv9MA/edit)
  - Release tasks and procedure  
<https://github.com/kmesh-net/kmesh/issues/894>
- **Post release:**
  - **some blogs on:**
    - **zero-downtime during restart**
    - **performance: latency and cpu memory**
    - **obsevability**
    - **A series of blogs on kmesh traffic management features**
- **OSPP 2024:**
  - PR: Split Proposal and Implement
  - Report: 9.30
  - Document
- **Next release:**
  - ingress gateway :
  - egress
  - headless
  - adapt to istio 1.24
  - observability: trace, metrics
  - mtls
  - OSPP projects
  - Authorization offload xdp: on ip
  - Kernel native mode: zero-downtime restart
  - Serve specific use case: like AI

- kmeshctl

## Sep 19, 2024

- v0.5 release
  - <https://github.com/kmesh-net/kmesh/pull/610> ads scalability: 1. **scale down fail, root cause has not been figured out** 2. scale up crash
  - bpf log: update bpf2go.go to build two kind of .o, and kmesh daemon can load according to kernel version - tianmuyang
- add a access log knob in kmesh-daemon -lizhencheng

## Sep 12, 2024

- [zhangmingyi] Control-plane and data-plane decoupling
- [Zhonghu] should we start mda bypass independantly
  - Mda cannot collaborate with Workload Ads mode - weibin
  - bypass can work alongside with workload/ads
  - **option 1 we must specify ads/workload before using bypass、mda – yaozengzeng**
  - **option 2 can use bypass/mda alone, later we can consider separate binary - xsy**
- [ ] v0.5 release
  - blocker <https://github.com/kmesh-net/kmesh/pull/610>
  - docker image cannot run on 5.10 kernel: bpf\_snprintf :
    - define structured log event: 3 day
    - workaround: turn off export log to userspace temporarily
  - Doc: 1. performance test report 2. restart will not influence application communication
  - **Plan: 9. 20**

## Sep 05, 2024

- consistent hash <https://github.com/kmesh-net/kmesh/pull/394> Proposal need to review
  - hash algorithm can be risky
- bpf log
  - export to userspace but can not be printed - liwei
  - error code printed diff with bpf printk: <https://github.com/kmesh-net/kmesh/issues/628>
  - 5.13 compiled cannot be run in 5.10 kernel, cilium resolve by compiling before running+
- [muyang] protobuf oneof filed >=4, <https://github.com/kmesh-net/kmesh/issues/702>
  - first upgrade protobuf-c
  - check how envoy do generate
- [yaozengzeng] Added kmeshctl <https://github.com/kmesh-net/kmesh/issues/552>

- Access log: how should we ignore readiness liveness probe  
<https://github.com/kmesh-net/kmesh/pull/814>

Aug 29, 2024

- kubecon questions about kmesh
  - support cross network access
  - huawei consumer cloud interested in performance
  - how to implement locality aware lb
    - k8s service policy consistency
  - other control plane supported?
- [hxxuzhonghu] v0.4.1 release
  - release note: list bug fixes - lizhcheng
  - build push image kmesh and waypoint
  - enhanced kernel image can only run on oe2303
- kmesh 0.4.0 can not run in kernel < 5.13
  - <https://github.com/kmesh-net/kmesh/issues/758>
  - comment on issue: they need to compile image in kernel below 5.13
  - investigate cilium – liuxin
  - consider support kernel 4.x: first workload mode
- [hxxuzhonghu] bpf map not correctly updated after kmesh restart
  - <https://github.com/kmesh-net/kmesh/issues/789>
  - endpointKeys search slow, because it iterate all the endpoint map
  - <https://github.com/kmesh-net/kmesh/pull/783> not sure which corner case is not correctly handled
- [yaozengzeng] Supported istio version 1.22+
  - compatibility with istio
  - istio has only 1.23 1.22 we supported now
  - ads: no e2e, in theory it can support older istio, but we haven't tested it.
  - ads >= 1.14
- [liujinyao] how to set workload locality and how to enable locality lb
- OSPP: organize a meeting next week to discuss the progress and challenges/blocker - yaozengzeng

Aug 22, 2024

- [xxy] authz offloading
  - [do rbac in xdp prog by supercharge-xxy · Pull Request #712 · kmesh-net/kmesh \(github.com\)](#)
- [lzc] accesslog
  - [add accesslog to enhance observability of kmesh by LiZhenCheng9527 · Pull Request #732 · kmesh-net/kmesh \(github.com\)](#) review



- [zmy] restart double prog
  - kmesh crash in kernel 5.10
  -

Aug 15, 2024

- [xsy] authz offloading
  - port match has been verified
  - ip match need to redesign
  - add a new map to store workload's authorization policy
- [nlgwcy] support large scale for ads mode
  - manually manage map size scale up/down
- [yzz] L4 Metric name confusing \_service\_
  - need lzc to confirm
- [yzz] Docs
  - Developer guide:Missing docs on how to debug : config dump and how to adjust log level, bpf map lookup  
<https://github.com/kmesh-net/kmesh/issues/733>
  - How to manage workload with kmesh:  
<https://github.com/kmesh-net/kmesh/issues/721>
  -
- 

Aug 8, 2024

- [tian muyang] bpf coverage:
  - integrate with bpf test framework, not run with e2e
- [zhangmingyi] after restart, we can see two progs attached  
<https://github.com/kmesh-net/kmesh/issues/700>
- **[changye]** <https://github.com/kmesh-net/kmesh/issues/670>
  - mingyi: help add ut and resolve conflict
- [xsy] authz offloading is on developing
- Better renaming ads and workload mode:
  - wcy: local and remote mode
  - yzz: Full Offload(全卸载) 和 Half Offload(半卸载)
  - zhonghu: Kernel Native(原生内核模式) Dual Engine(分层治理)
  - lzc: Simple Mode and Advanced Mode
- [lin zihong] Feature circuit breaker  
<https://github.com/kmesh-net/kmesh/pull/570>  
<https://github.com/kmesh-net/kmesh/pull/397>
- [qijing] <https://github.com/kmesh-net/kmesh/issues/702>

Aug 1, 2024

- authorization offload -xsy
  - map in map
- hostnetwork pod access - linzihong  
<https://github.com/kmesh-net/kmesh/issues/631>
- Kind cluster: during restart, traffic is influenced - yzz
- Service map flush: endpoint count unexpected - zhonghu
- Kmesh dameon restart failed: caused by kmesh daemon cleanup not complete. - fixed

July 25, 2024

- [yuanqijing] ratelimit
  - <https://docs.google.com/document/d/16rrxrKFhpExwgf6HL2Jx58ZXsaTLs9BSr8fRjdYfI20/edit#heading=h.991af1q3sqyv>
  - L4 ratelimit based on token bucket
- [liujinyao] locality load balance and healthy check
  - design a more efficient map instead of looping over all endpoints to pick one.
- [xiesongyang] Authz offload: possible to land down in v0.5
- [yzz] namespace manage : @yzz and @wcy
- Better renaming ads and workload mode:
  - wcy: local and remote mode
  - yzz: Full Offload(全卸载) 和 Half Offload(半卸载)
  - zhonghu
  - lzc: Simple Mode and Advanced Mode
  -
- 

July 18, 2024

- [yanchaomei] kmesh ebpf UT test proposal
  - Shared BPF\_RUN\_PROG framework to run bpf in userspace
- [linzihong] Circuit breaker implement
  - Need to further discuss how to reset connection when max connection limit reaches

- [shenkaiwen] performance monitoring proposal
- [zhonghu xu] DNS Request Capture
  - option1: set iptables to redirect request kmesh daemon  
pod-> kmesh daemon -> coredns
    - may conflict with cni
  - option2: implement a DNS plugin: pod -> coredns->DNS plugin
    - add a standalone component
- *dataplane-mode: none*, bypass is not needed in kmesh manage mode
  - If we make bypass only work for sidecar, we can cutoff some simulation connect
  - There is a bug checking sidecar enabled or not
  - @yzz: make bypass only work for sidecar, *dataplane-mode: none* can be used to exclude specific pod within a ns
  -
- 0.4 new feature documents
- 0.4.1 scheduled tomorrow
  - two issues left

July 11, 2024

- lzh: circuit breaker proposal
  - maxConnections can be implemented first
  - L7 max requests, error response code evict can be thoroughly thought about.
- Locality lb: cluster: p0{ } -> p1{ } : investigate envoy mechanism and share with us next week
- Next Release Plan(v0.5):
  - IPv6 in ads, consider if dual stack can be done
  - Support big scale cluster in ads mode
  - DNS capture: app -> `foo.bar`, kmesh resolve the foo.bar.
    - Istio ServiceEntry.Host allocate ip address
  - Authorize: offload completely to xdp
  - E2E: supplement cases
    - ipv6

- pod management
  - authz
  - traffic management cases
- L7 traces
  - 0->1
  - provide integration with trace backend, jaeger, zipkin, etc
- Metrics: integration with prometheus, grafana
- Resilience: Kmesh restart persistence, not to lose control during restart/upgrade
  - map structure modified should be carefully considered
- Resilience <https://github.com/kmesh-net/kmesh/issues/555>
- Resilience workload bpf map update <https://github.com/kmesh-net/kmesh/issues/503>
- Documents: add docs for existing features
- circuit breaker on connections

## July 04, 2024

- [zhangmingyi] kmesh restart :
  - The sequence of daemon deletion and pod deletion is to be confirmed.
- control plant repo
- [tianmuyang] vendor and go version

## June 27 , 2024

- [yzz] mugen test framework is used to test L7, which can be replaced by e2e, we can keep it until e2e cover these cases
- [wcy] Telemetry: L4 metric collection from kernel
  - connection metrics can be collected via bpf prog or kprobe
  - long running connection: should we report periodically?
    - we can report periodically
  - global metric report, like connections number, connection latency, error rate on pod granularity
- ipv6 support <https://github.com/kmesh-net/kmesh/pull/462>
  - workload mode
  - waypoint decoder should support ipv6 address
  -
- *authz from waypoint does not work as expected, this is because the src addr is changed to waypoint addr*

- *If kmesh support src addr after waypoint, how should we do*
- Kmesh cni plugin failed, should we allow pod start up?
  - Keep in line with other cnis

## June 20 , 2024

- [xsy] Test results of packet drop when auth processing ( <https://github.com/kmesh-net/kmesh/pull/424>)
  - performance is greatly affected for short-connect via user-mode auth
  - Next:
    - Analyze whether auth can be implemented in eBPF(L4 auth)
- [mingfa] bpf log print
  - Support print bpf log in user mode/kernel mode via kmesh-daemon parameter in high kernel version.
  - dynamic bpf loglevel adjustment(coordinated with @linzihong)
- [yaozengzeng] E2E Test
  - Introduces local E2E Test
  - Introduces how to add a tested app
  - Introduces how to add a new testcase

## June 13 , 2024

- Reliability of Kmesh restart: Kmesh can auto manage pods after restart
  - Pin map on the node: [mingyi]
  - mount bpf fs in kind container [mingyi]
  - Simulate send in daemon [liwei]
- Dns typed cluster: Kmesh Cluster Definition may need to add endpoints with ``hostname``
  1. app-> domain2(real domain) -> DNS SE {**domain 3, domain4**} -> backend - shiqi
  2. app -> domain1(non exist) -> {endpoint ip addr} Istio: <https://istio.io/latest/docs/ops/configuration/traffic-management/dns-policy/>
- Pod enroll / unroll
- bpf log: < 5.13 trace pipe, >= 5.13 export user space though bpf map
- 

## June 6 , 2024

- [nlgwcy] Reliability of Kmesh restart
  - old bpf prog is in detach status if the old connection is still open. does not influence new prog take effect on new connection
  - bpf map persistent during restart, how should we update map after restart

- option 1: restore user space cache from bpf map after start, then send delta request with local resources; Following step is similar to how we do during reconnect
  - option2: send delta request with `\*`, and during response handling, we compare directly with bpf map to update and remove resources
- Kmesh resource bpf prog/map clearing
- [hxyzhonghu] Waypoint capture work unexpected  
<https://github.com/kmesh-net/kmesh/issues/406>
  - Waypoint restart -> service.waypoint update
  - *Service endpoints replicates update*
  - *Namespace scoped waypoint*
  - *Pod scoped waypoint*
  - Unit test can coverage all this scenarios
- L7 telemetry
  - L7 Metrics attributes has been added.
  - Trace has not yet tested
  - Accesslog has not yet tested
- L4 telemetry: next week
- Pod level management, lack of ut.
  - add CNI simulate sending packet in kmesh daemon.
- Dynamic log level

May 30 , 2024

- Develop Convention:
  - Big Endian vs Little Endian:
    - Bpf Map key/value choose byte order according to kernel behavior
  - golang & c
    - <https://www.kernel.org/doc/html/v4.10/process/coding-style.html>
    - <https://github.com/MaJerle/c-code-style>
    - golang refer kubernetes guide
- License problem, bpf and ko requires GPL, but we clare apache 2.0
  - <https://github.com/kmesh-net/kmesh/issues/366>
- DNS Service Routing:
  -
- Bpf log user space dump
- Atomatically manage workload during Restart/Upgrade, should not influence application communication
- IPV6 Support : <https://github.com/kmesh-net/kmesh/issues/291>
  - Confirm whether java application can be managed now ?
- Observability:
  - L4 proposal is filed,
- Circuit breaker proposal:
  - Discuss offline

## May 23 , 2024

- Certificate Subscribe: @mingyi
  - We may not need priority queue
  - Supplement UT, especially for race test. `go test -race`
- Bpf map size adj:
  - how many endpoints per service?
  - one listener can contains many filter chains
- Accesslog and metric in eBPF:
  - Provide what is the metric and accesslog look like
  - How to use it
- Kmesh auth dynamic update
  - for workload mode, we now connect with istiod using `ztunnel` role
  - BigEndian & LittleEndian

## May 16 , 2024

Attendee:

- li zhencheng
- liuxin
- zhang mingyi
- kang mingfa
- lin zihong
- liu jinyao
- liwei
- matrix
- qi jingyuan
- shenkaiwen
- shenming
- Sliverfish
- tian muyang
- wang
- xie songyang
- yu wenhui
- Introduce OSPP 2024 projects :  
<https://summer-ospp.ac.cn/org/orgdetail/f1ea2799-85b8-48c0-ba6f-9de84bbb2ec6?lang=zh>
- BPF map size adjust:
  - support *5000 services, 100,000 workloads*
- Bpf map in map optimize:
  - Hierarchy xds structure, one listener can contains many filter chains
  - optimize proposal is wip
- Certificate Subscribe

May 9 , 2024

- OSPP 2024:  
<https://summer-ospp.ac.cn/org/orgdetail/f1ea2799-85b8-48c0-ba6f-9de84bbb2ec6?lang=zh>
- [kangmingfa] ConsistentHash LB
  - L7 http header based hash to select backend
  - Consistent hash ebf prog attach point(skops or veth tc)
- v0.4 features assigned
- v0.3.1 releases:
  - fixed ipv6 authz
  - domain match in ads mode
  - OE 2303 <https://github.com/kmesh-net/kmesh/pull/303>
  - *DNS resolve failed from python - To be investigated*
- Should we continue support OE 2303:
  - Keep temporarily
  -

April 25 , 2024

- OSPP 2024:
  - We have submitted 8 projects
  -
- Retrospect v0.3.0:
  - Authz
    - Server listen [::]:8080, kmesh authz does not work, can fix today - Zhonghu Xu
    - client rst after timeout - @tianmuyang @liuxin
    - AuthorizationPolicy does not take effect when updated, can only recreate it to make it work - @tianmuyang @xsy
  - Waypoint and Authz Use Guide
    - File pr to website repo - @yaozengzeng
  - Multi spans service access: like a->b->c.
    - a can communicate with b, but kmesh LB does not take effect,
    - b->c is blocked
  - After kmesh restart, workload need to be restarted to be managed by kmesh again
    - Kmesh daemon get node local pods, and load that managed info into bpf map
- Release 0.4 plan
  - Support mtls
  - Istio has introduced new capture model for namespace/service/pod, we may need to investigate how to collaborate with this model
  - L4 access logs metrics
  - Revist L7 accesslogs traces
  - Supplement L4/L7 capabilities test coverage- E2E



- Support graceful upgrade, should not require workload restart after kmesh upgrades
- Authz should support more dimensions, align with [AuthorizationPolicy](#)
- Consistent Hash: L4, L7
- Accelerate bpf map update
- Use guide documents
- *add more*

## April 18 , 2024

- Authorize: client waits for a long time to get notified and close connection ~1minute
  - socket migration may help
  - prototype verifying
- Waypoint:
  - We need a task guide to show how use waypoint
  - Complete end to end test
- Kind cluster:
  - can support workload mode seamlessly
  - <https://github.com/kmesh-net/kmesh/pull/242> may break ads mode
- Bypass {}:
  - kmesh daemon get pod netns, by loop over /proc/{pid}
- 开源之夏:

## April 11 , 2024

- [liuxin, zengzeng] ebpf->waypoint test
  - waypoint listens on 15019, but workload waypoint's port is 15008
  - ebpf loop limitation, first mock a client to send proxy protocol to waypoint
  - waypoint code forked from istio proxy, to push to [kmesh.net/waypoint](https://github.com/kmesh-net/kmesh/pull/242) repo
  - waypoint deployment: image should be changed to kmesh one, but need to have a test
- [Authorization]: check workload take charge by kmesh
- Bypass: `bypass` all or none. Setup iptables in kmesh daemon

## March 21, 2024

- [zhonghu] <https://github.com/kmesh-net/kmesh/issues/189>, kmesh node metadata and id maybe incorrect
  - Incorrect inbound listener
  - Deadloop
  - It takes long time 3 minutes for the policy to take effect
  - Zhonghu and Mingyi.
- [zengzeng] Waypoint can receive and parse TLV, and redirect to upstream cluster
  - create a new repo for waypoint proxy, decoupled from envoy
  - cluster patch, support in upstream istio
- [xsy] Authz
  - socket fd migration is a blocker

- **alternative option: xdp can send rst to notify peer close**
- [mingyi, weibin] Use guide, plan to start this week
- [zhencheng] UT: should cover more complex time serials during communicate with xds server
  - first get to know more about xds
- Kmesh Release: 4.15, 2024

## March 21, 2024

- [yaozengzeng] TLV parsing is complete
  - compatible with waypoint processing for workload.
- [xsy ] Authz support part: first support ip blocks
  -
- [mingyi,weibin] Supplement use guide
  - reference: <https://istio.io/latest/docs/tasks/traffic-management/request-routing/>
- [zhencheng] Controller UT

## March 14, 2024

- [yaopzengzeng] waypoint does not support envoyfilter
  - some types of envoyfilters supported
  - but cluster `Add` not take effect
- [xsy ] Authz support part: first support ip blocks
  - new connection authz complete 90%
  - next step is to manage existing connection
- [] Supplement use guide
  - L4 loadbalancer (xds, workload mode) mingyi, weibin
  - L7 Example on Euler 23.03, HTTP Routes, Weighted LB, LB
- Kmesh and Istio version compatabile matrix - mingyi
- Controller UT:
- Twitt [https://kmesh.net/en/blog/kmesh\\_kubecone/](https://kmesh.net/en/blog/kmesh_kubecone/)

## March 7, 2024

- [mingyi] Kmesh rds and eds not updated  
<https://github.com/kmesh-net/kmesh/issues/144>
  - Have figured out the root cause: we donot add resource names in the ack request for rds and eds
- [chenmin] Kind can not run kmesh, <https://github.com/kmesh-net/kmesh/issues/137>
  - multi kmesh daemon in kind shares one bpf map
  - namespace cls(a flag to indicate this pod is controlled by kmesh) need cgroup to distinguish
  - Use single node kind cluster temp
  - Cilium customized a kind image, can we use it?
- [chenmin] Provide a `make ut` cmd, set up env before hand.

- [liwei] Bypass Proposal: need to supplement pod label fetch solution:
  - <https://github.com/kmesh-net/kmesh/pull/148/files>
  - kmesh daemon watch kube-apiserver: filed selector

## Feb 29, 2024

- [liwei] Discuss the proposal of bypass.
  - introduce two labels: one controls outbound bypass, one controls inbound bypass
  - pod labels fetch
    - we discussed two options: 1. kmesh daemon watch kube-apiserver 2. implement a kmesh apiserver, reduce load to kube-apiserver
    - to investigate if RTDS fits Zhonghu Xu
  - CNI
- Kmesh MileStone v0.3
  - Remote L7 proxy: (minimized requirement) Make http plaintext traffic redirected through waypoint
  - L4 Authorization: @muyang
    - How to close connection:
      - new connection, we can close it directly
      - *existing connection, if we want to close it, we need to store its fd in userspace or fetch the fd.*
      - First implement ip black list

## Feb 22, 2024

- v0.2.0 blog @wuchangye
- v0.3 release feature plan  
[https://docs.google.com/spreadsheets/d/1gT01\\_Fns55ZgJiPjuFR-DN\\_Ph9ZlStQVRYBl2C7nvyl/edit#gid=0](https://docs.google.com/spreadsheets/d/1gT01_Fns55ZgJiPjuFR-DN_Ph9ZlStQVRYBl2C7nvyl/edit#gid=0)

## Feb 1, 2024

- [hzxuzhonghu] UT coverage <https://github.com/kmesh-net/kmesh/issues/104>
  - how to test BPF code (@changye)
- Build binary and image from docker container
  - <https://github.com/kmesh-net/kmesh/pull/107/files>
  - <https://github.com/kmesh-net/kmesh/pull/101/files>
- [chenmin] Helm install.
- [chemin] CI automatically image build and push
- [changye] Investigate kernel module compatibility issue
- xDS resource cache
- v0.2 release:
  - LB based on workload:
  - ads refactor: @zengzeng
  - wds: open pr today @weibin

- Ask me Anything (@changye @hxxuzhonghu)

## Jan 25, 2024

- [liwei] Discuss the final effect of make docker.
  - Provide make build and make docker
  - build binaries from docker container according to kernel version and enhanced kernel or not.
  - Compile image should include dependent tools.
  - Kmesh image should support running on a range of kernel versions, e.g. > 5.10
  - helm install (@chenmin)
  - zengzeng: intermediate changes influence code commit, need a command to restore the changed files
- [hxxuzhonghu] Refactor CacheFlush
  - <https://github.com/kmesh-net/kmesh/blob/main/pkg/cache/v2/flush.go#L34-L42>
  - cache flush proposal
- [songyang] Kmesh L4 Authz: how to enforce authorization policy for a established connection
  - We need a proposal
- [yaozengzeng] Kmesh ADS client
- v0.2.0 release scheduled 5th of Feb
  - features: 1. ads 2. helm install 3. support plaintext communication

## Jan 18, 2024

- Added a KEP directory and provide a prototype template
- [zhangwei, wcy] Investigate: Protocol used between kmesh and waypoint
  - TODO: list all the cases, and the expectations from kmesh
- [chenmin] Provide an image used to build kmesh , OWNER: let-bit and we-li
  - <https://github.com/kmesh-net/kmesh/issues/76>
- [chenmin] Integration test <https://github.com/kmesh-net/kmesh/issues/96>
- 

## Jan 11, 2024

- [kwb] Kmesh support xds Workload model
- [zhangwei, wcy] Investigate: Protocol used between kmesh and waypoint
  - L4 -> L7 connecting metadata transport protocol:tlv
    - type: deploymentName="aa" -> t:1(type list);l:sizeof(v);v:"aa"
    - extension type: -> t:USHORT\_MAX, l:sizeof(tlv), v:"user defined"
- [wcy] Owner set according to components

- [chenmin] compile & install optimization

## Jan 4, 2024

- [wcy] Owner set according to components
- [zhangwei] proxy need some node metadata info, check if these info are included in Workload API, need to check
- [yaozengzeng] Kmesh daemon stand for what role, check if ztunnel works?
  - workload incsync - watch | subscribe when first request
  - xds fullsync
- [zhangwei, wcy] Investigate: Protocol used between kmesh and waypoint
- [xsy] Investigate Kmesh server side L4 authorization
- [kwb] xds resources subscribe, including `Address`, `Cert` `Authorization`
- Please Assign issues <https://github.com/kmesh-net/kmesh/issues>

## December 28, 2023

- [hxxuzhonghu] We need owner files, then all the future PRs can be merged by kmesh-bot
  - kmesh-bot deploy env (zhonghu)
  - Divide by components, userspace, kernel, bpf, file an issue
- [hxxuzhonghu] enable organization wide 2FA
- [minchen/mingyi zhang] discuss testing framework to enable functional test on Github action
  - build and ut can be tested with github action, verified in private repo.
  - e2e now depends on mugen, which can be run in openEuler only.
  - We need an e2e framework - long-term work
- [zhangwei] Fork Envoy to implement a new transport protocol?
- [weibin] L4 Capability need `workload` support, we need to investigate what is still missing.

## December 21, 2023

- [hxxuzhonghu] Release v0.1.0 features and TODO tasks.
  - L4 governance capabilities: routing, gray, and load balancing;
  - L7 governance capability: HTTP1.1 routing, gray, and load balancing;
  - SOCKMAP acceleration: TCP acceleration can be performed based on SOCKMAP BPF in traditional sidecar mode;
  - Enable Kmesh based on namespaces;
  - One-click deployment: Image release and one-click deployment of Kmesh based on YAML;
- TODO tasks:
  - V0.1.0 is tentatively released on December 25; - Wu Changye
  - Image creation, software package automation, and community issue tracking; - Chen Wei/Zhang Mingyi

- The meeting tools are determined before the next meeting and the meeting calendar is determined. Tentatively every Thursday from 4:00 p.m. to 5:00 p.m.; - Xu Zhonghu
- Create a channel under cncf. Complete before the next meeting; - Xu Zhonghu
- Introduce the PR robot and CI access control deployment. The robot needs to coordinate the execution machine. - Xu Zhonghu